

The Claims

1. (Currently amended) One or more computer-readable media having stored thereon a module of a transform module graph for processing audio data, the module including a plurality of instructions for execution in kernel-mode that, when executed in kernel-mode by one or more processors of a computer, causes the one or more processors to perform acts including:

receiving in the transform module graph a data packet including audio data; checking in the transform module graph, based at least in part on a channel group identified in a channel group portion of the data packet, whether the data packet corresponds to a set of one or more channel groups; and operating on the data packet based at least in part on a result of the checking

forwarding the data packet to an allocator module for re-allocation of the memory space used by the data packet if the data packet corresponds to the set of one or more channel groups.

2. (Currently amended) One or more computer-readable media as recited in claim 1, wherein the set of one or more channel groups is received by the module via a set parameters interface.

3. (Canceled).

4. (Currently amended) One or more computer-readable media having stored thereon a module of a transform module graph for processing audio data, the module including a plurality of instructions for execution in kernel-mode that, when executed in kernel-mode by one or more processors of a computer, causes the one or more processors to perform acts including: as recited in claim 1, wherein the operating comprises

receiving in the transform module graph a data packet including audio data;
checking in the transform module graph, based at least in part on a channel
group identified in a channel group portion of the data packet, whether the data
packet corresponds to a set of one or more channel groups; and

forwarding the data packet to an allocator module for re-allocation of the memory space used by the data packet if the data packet does not correspond to the set of one or more channel groups.

5. (Currently amended) One or more computer-readable media having stored thereon a module of a transform module graph for processing audio data, the module including a plurality of instructions for execution in kernel-mode that, when executed in kernel-mode by one or more processors of a computer, causes the one or more processors to perform acts including: as recited in claim 1, wherein the operating comprises

receiving in the transform module graph a data packet including audio data;

checking in the transform module graph, based at least in part on a channel group identified in a channel group portion of the data packet, whether the data packet corresponds to a set of one or more channel groups; and

changing a channel group identifier in the channel group portion of the data packet if the data packet corresponds to the set of one or more channel groups.

6. (Currently amended) One or more computer-readable media having stored thereon a module of a transform module graph for processing audio data, the module including a plurality of instructions for execution in kernel-mode that, when executed in kernel-mode by one or more processors of a computer, causes the one or more processors to perform acts including:

receiving in the transform module graph a data packet including audio data; checking in the transform module graph which channel group the data packet corresponds to, wherein the channel group the data packet corresponds to is identified in a channel group portion of the data packet;

identifying in the transform module graph, based at least in part on the channel group, a new channel group for the data packet; and

modifying in the transform module graph the data packet to include the new channel group.

7. (Original) One or more computer-readable media as recited in claim 6, wherein a set of channel group to new channel group mappings for use in the identifying is received by the module via a set parameters interface.

8. (Currently amended) One or more computer-readable media having stored thereon a module of a transform module graph for processing audio data, the module including a plurality of instructions for execution in kernel-mode that, when executed in kernel-mode by one or more processors of a computer, causes the one or more processors to perform acts including:

receiving in the transform module graph a data packet including audio data; checking in the transform module graph which channel the audio data corresponds to;

identifying in the transform module graph, based at least in part on the channel, a new channel for the data packet; and

modifying in the transform module graph the audio data to include the new channel.

9. (Original) One or more computer-readable media as recited in claim 8, wherein a set of channel to new channel mappings for use in the identifying is received by the module via a set parameters interface.

10. (Currently amended) One or more computer-readable media having stored thereon a module including a plurality of instructions for execution in kernel-mode that, when executed in kernel-mode by one or more processors of a computer, causes the one or more processors to perform acts including: as recited in claim 8, wherein the plurality of instructions further cause the one or more processors to perform acts including

receiving a data packet including audio data;
checking which channel the audio data corresponds to;
identifying, based at least in part on the channel, a new channel for the data packet;

modifying the audio data to include the new channel; and
maintaining a channel to new channel mapping, for use in the identifying, in which multiple channels can map to the same new channel and in which a single channel can map to multiple new channels.

11-29. (Canceled).

30. (New) A method implemented in a kernel-mode module of a transform module graph for processing audio data, the method comprising:
receiving in the transform module graph a data packet including audio data;
checking in the transform module graph which channel the audio data corresponds to;

identifying in the transform module graph, based at least in part on the channel, a new channel for the data packet; and

modifying in the transform module graph the audio data to include the new channel.

31. (New) A method as recited in claim 30, wherein a set of channel to new channel mappings for use in the identifying is received by the module via a set parameters interface.

32. (New) A method as recited in claim 30, further comprising maintaining a channel to new channel mapping, for use in the identifying, in which multiple channels can map to the same new channel and in which a single channel can map to multiple new channels.

33. (New) A method implemented in a kernel-mode module of a transform module graph for processing audio data, the method comprising:

receiving in the transform module graph a data packet including audio data; checking in the transform module graph, based at least in part on a channel group identified in a channel group portion of the data packet, whether the data packet corresponds to a set of one or more channel groups; and

forwarding the data packet to an allocator module for re-allocation of the memory space used by the data packet if the data packet corresponds to the set of one or more channel groups.

34. (New) A method as recited in claim 33, wherein the set of one or more channel groups is received by the module via a set parameters interface.

35. (New) A computing device comprising:

 a processor; and

 a memory, coupled to the processor, having instructions to implement a kernel-mode module of a transform module graph for processing audio data, the instructions causing the processor to perform acts comprising:

 receiving in the transform module graph a data packet including audio data;

 checking in the transform module graph, based at least in part on a channel group identified in a channel group portion of the data packet, whether the data packet corresponds to a set of one or more channel groups;

 and

 forwarding the data packet to an allocator module for re-allocation of the memory space used by the data packet if the data packet does not correspond to the set of one or more channel groups.

36. (New) A computing device as recited in claim 35, wherein the set of one or more channel groups is received by the module via a set parameters interface.

37. (New) A system having a kernel-mode module of a transform module graph for processing audio data comprising:

means for receiving in the transform module graph a data packet including audio data;

means for checking in the transform module graph, based at least in part on a channel group identified in a channel group portion of the data packet, whether the data packet corresponds to a set of one or more channel groups; and

means for changing a channel group identifier in the channel group portion of the data packet if the data packet corresponds to the set of one or more channel groups.

38. (New) A system as recited in claim 37, wherein the set of one or more channel groups is received by the module via a set parameters interface.

39. (New) One or more computer-readable media as recited in claim 4, wherein the set of one or more channel groups is received by the module via a set parameters interface.

40. (New) One or more computer-readable media as recited in claim 5, wherein the set of one or more channel groups is received by the module via a set parameters interface.